

## Lecture Module - Electrical Instruments

ME3023 - Measurements in Mechanical Systems

Mechanical Engineering

Tennessee Technological University

### Topic 2 - Prototype Circuits

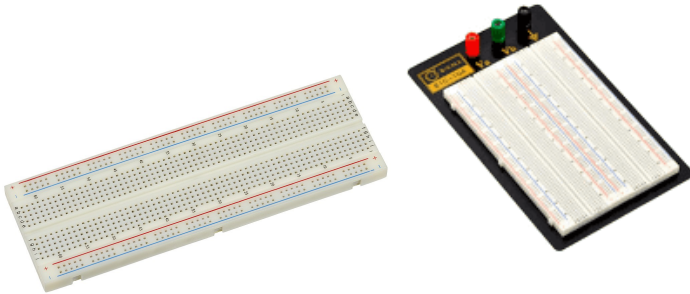
## Topic 2 - Prototype Circuits

- Circuits for Mechanical Engineers
- Using a Solderless Breadboard
- Using a Desktop Power Supply
- Examples

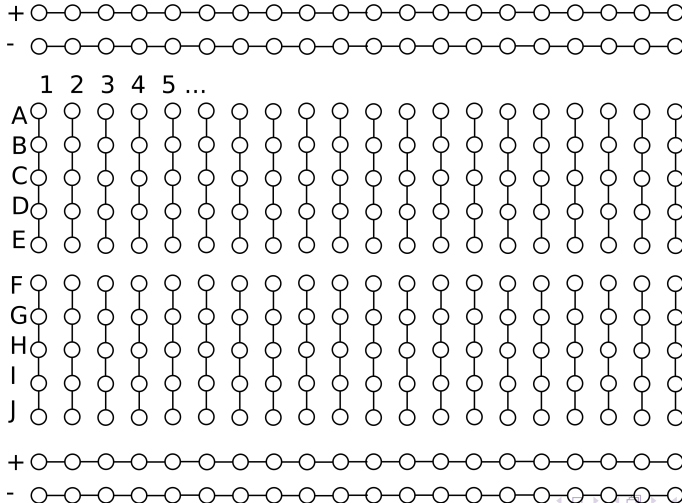
# Circuits for Mechanical Engineers

Engineering is an integrated field...

# Using a Solderless Breadboard

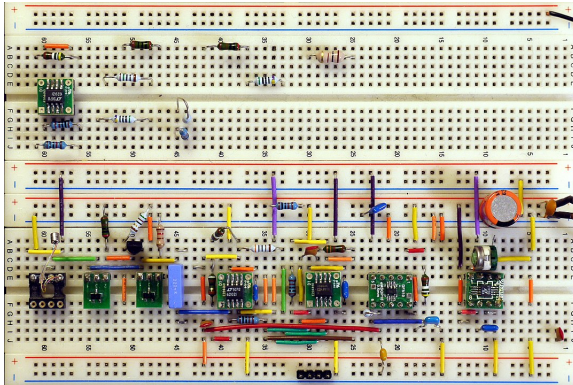


# Using a Solderless Breadboard



# Using a Solderless Breadboard

Question: Why is the breadboard separated into sections? (note: this image shows 4 - top,bottom,top,bottom)



# Using a Solderless Breadboard

Pros:

Cons:

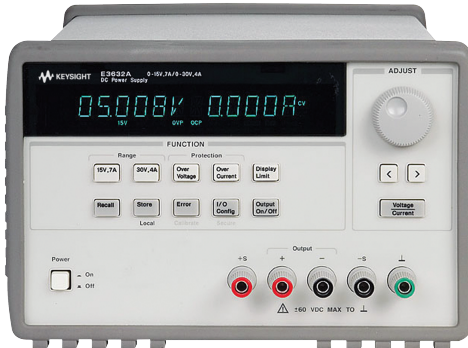
Common Mistakes:

## Using a Solderless Breadboard





## Using a Solderless Breadboard



# Using a Desktop Power Supply



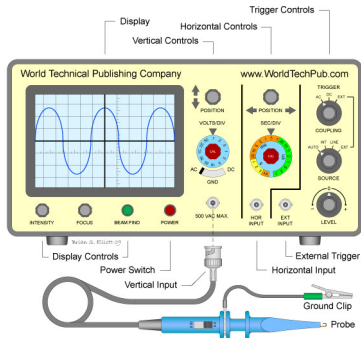
# Using a Desktop Power Supply

Thought Exercise: How does a function generator work?

What is in the box?

# Using a Desktop Power Supply

# Examples



## Examples

